

6DB5

Beam Power Tube

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC) 6.3 volts

Current 1.2 amp

Direct Interelectrode Capacitances

(Approx.):^a

Grid No.1 to plate. 0.2 μf

Grid No.1 to cathode & grid No.3,
grid No.2, and heater 13 μf

Plate to cathode & grid No.3,
grid No.2, and heater 8 μf

Mechanical:

Operating Position. Any

Maximum Overall Length. 2-3/4"

Maximum Seated Length. 2-1/2"

Length, Base Seat to Bulb Top (Excluding tip). . . 2-1/8" $\pm$ 3/32"

Diameter. 0.750" to 0.875"

Bulb. T6-1/2

Base. Small-Button Noval 9-Pin (JEDEC No.E9-1)

Basing Designation for BOTTOM VIEW. 9GR

Pin 1 - Grid No.2

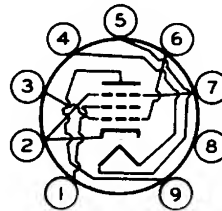
Pin 2 - Cathode,
Grid No.3

Pin 3 - Grid No.1

Pin 4 - Heater

Pin 5 - Heater

Pin 6 - Grid No.1



Pin 7 - Cathode,
Grid No.3

Pin 8 - Internal Con-
nection—
Do Not Use

Pin 9 - Plate

AMPLIFIER — Class A₁

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE 300 max. volts

GRID-No.2 (SCREEN-GRID) VOLTAGE 150 max. volts

GRID-No.2 INPUT 1.25 max. watts

PLATE DISSIPATION 10 max. watts

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode . . 200 max. volts

Heater positive with respect to cathode . . 200^b max. volts

Typical Operation and Characteristics:

Plate Supply Voltage. 110 200 volts

Grid-No.2 Supply Voltage. 110 125 volts

Grid-No.1 (Control-grid) Voltage. -7.5 - volts

Cathode Resistor. - 180 ohms



RADIO CORPORATION OF AMERICA
Electron Tube Division
Harrison, N. J.

DATA
7-61

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Peak AF Grid-No.1 Voltage.	7.5	8.5	volts
Zero-Signal Plate Current.	49	46	ma
Max.-Signal Plate Current.	50	47	ma
Zero-Signal Grid-No.2 Current.	4	2.2	ma
Max.-Signal Grid-No.2 Current.	10	8.5	ma
Plate Resistance (Approx.)	13000	28000	ohms
Transconductance	8000	8000	μmhos
Load Resistance.	2000	4000	ohms
Total Harmonic Distortion.	10	10	%
Max.-Signal Power Output	2.1	3.8	watts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

For fixed-bias operation	0.1 max.	megohm
For cathode-bias operation	2.2 max.	megohms

VERTICAL-DEFLECTION AMPLIFIER

Maximum Ratings, Design-Center Values Except as Noted:

For operation in a 525-line, 30-frame system^c

DC PLATE VOLTAGE	300 max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE (Absolute maximum) ^d	2000 ^e max.	volts
DC GRID-No.2 (SCREEN-GRID) VOLTAGE . . .	150 max.	volts
PEAK NEGATIVE-PULSE GRID-No.1 (CONTROL-GRID) VOLTAGE	250 max.	volts
CATHODE CURRENT:		
Peak	200 max.	ma
Average.	55 max.	ma
GRID-No.2 INPUT.	1.25 max.	watts
PLATE DISSIPATION.	10 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	200 max.	volts
Heater positive with respect to cathode	200 ^b max.	volts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

For fixed-bias operation	0.1 max.	megohm
For cathode-bias operation	2.2 max.	megohms

^a Without external shield.

^b The dc component must not exceed 100 volts.

^c As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

^d This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one vertical scanning cycle. In a 525-line, 30-frame system, 15 per cent of one vertical scanning cycle is 2.5 milliseconds.

^e Under no circumstances should this absolute value be exceeded.

